

# PROJECT CLOSEOUT REPORT

Submitted to Large Project Oversight on 12/30/2016

## GENERAL INFORMATION

**Program/Project Name:** ND Courts Disaster Recovery

**Branch:** Judicial

**Project Sponsor:** Sally Holewa

**Project Manager:** Tom Harris

## PROJECT BASELINES

Original/ Final	Baseline Start Date	Baseline End Date	Program Baseline Budget	Actual Finish Date	Schedule Variance	Actual Project Costs to date	Estimated costs to end of Biennium	Cost Variance
Originally Baselined Information	10/23/2015	12/30/2016	\$2,000,000 <sup>1</sup>	12/30/2016	0%	\$1,656,349	\$337,000 <sup>2</sup>	0.4%
Final Baseline Information	10/23/2015	12/30/2016	\$2,000,000 <sup>1</sup>	12/30/2016	0%	\$1,656,349	\$337,000 <sup>2</sup>	0.4%

### Notes:

**Note 1:** The \$2,000,000 baseline budget represents the full programmatic budget for the 2015-2017 biennium, including program operations costs after project completion

**Note 2:** Encumbered program costs after project completion will continue until the end of the biennium (Estimated post project program operations expenses = \$137k, program risk reserve for issues/need resolution = \$200k/10% of budget)

**Note 3:** As a result of implementing a new network to stand up Disaster Recovery capabilities, the Judicial Branch was able to terminate legacy network services and reduce associated technology fees. This resulted in a direct cost savings to Judicial IT operations

- WAN Access State Fiber circuit fees (for August 2015 thru April 2016, credit to Judicial of \$7,650 realized in May 2016, \$19,550 total estimated biennial savings)
- FTE Technology (GB) fees per month (for August 2015 thru April 2016, credit to Judicial of \$13,950 realized in May 2016, \$35,650 total estimated biennial savings)
- Managed Firewall service fees per month (for February through April 2016, realized savings of \$1,200 at \$400 per month, \$6,400 total estimated biennial savings)

## MAJOR SCOPE CHANGES

There were no major scope changes for this project.

## PROJECT OBJECTIVES

Business Objective	Measurement Description	Met/ Not Met	Measurement Outcome
Mitigate the costs / impacts of an	By the end of the project, establish a solution capable of	Met	Conducted three full enterprise transition tests to the disaster recovery system. The

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interruption to court operations	supporting failover within 24 hours of an event		first test identified issues for corrective action and were incorporated into the transition process. The second and third tests were fully completed with the enterprise fully operating on the recovery site in less than 24 hours. The first test was conducted during non-peak hours and the second during peak hours. Both tests were completely successful.
Mitigate risk of not meeting statutory and regulatory requirements	By the end of the project, confirm capability to continue to provide processing for applications that support court operations and services after a failover event	Met	See measurement outcome above.
	By the end of the project, confirm the capability to continue to provide accurate records, matching primary data center accuracy with minimal data lag, after a failover event	Met	During normal operations, all enterprise data is simultaneously stored in both data centers to mitigate data loss after transition to recovery. During the peak period test, the applications experienced no data lag from the recovery site. Network speeds were maintained due to the implementation of a ring formation facilitating redundant access to the data center at equivalent transfer speeds. Multiple users were unaware that data access had transferred to the recovery site and had experienced no loss of quality in daily operations.

## POST-IMPLEMENTATION REPORT

Post-Implementation Reports are performed after a project is completed. A “PIR” is a process that utilizes surveys and meetings to determine what happened in the project and identifies actions for improvement going forward. Typical PIR findings include, “What did we do well?” “What did we learn?” “What should we do differently next time?” Notable findings are presented in this closeout report.

<b>Lesson learned, success story, ideas for future projects, etc.</b>
<b>What did we do well?</b> Our original goals were to stand up a disaster recovery system in a location far enough away from Bismarck where there would be no danger of a single natural disaster effecting both locations and incorporate the ability to restore all of the necessary systems making the Courts operational again statewide within 24 hours. We surpassed both goals. In fact we’re able to restore operations statewide within 3 hours.
<b>What did we learn?</b> It was important to configure the Virtual Protection Groups such that individual servers could be moved individually if needed rather than as a group. We also learned that Microsoft Exchange can be difficult to restore at a new location if not configured correctly beforehand and moved using an exact process.
<b>What should we do differently next time?</b> Continue to evaluate new disaster recovery software for the latest trends and features. Continue to evaluate the latest network solutions to ensure it is as robust as it can be and the most cost effective.